

## **OPEB ASSUMPTION MODEL**

For OPEB Cost Reports (Actuarial Valuations and Alternative Measurement Method Reports) Dated After

June 15, 2011

Method	CalPERS Assumption	Comments
Actuarial Cost Method	Entry Age Normal Cost Method or the Projected Unit Credit (service pro-rate) Method must be used as long as permitted under GASB statndards	Benefits for entry age through attained age: In projecting benefits back from attained age to entry age, the actuary should use a reasonable method, e.g. some historical average increase in past benefit costs, actual historic past benefit costs, a past select and ultimate table of benefit cost changes, etc.
		Entry Age Normal Cost in a tiered system: It is acceptable that normal cost be based upon benefits for the current member or based upon the benefits a new entrant would receive (in which case the accrued liability for current participants could be higher).
Asset Valuation Method	Determined by the plan actuary. The actuarial value of assets can be set equal to the market value of assets or calculated in accordance with the following constraints:  • In compliance with Actuarial Standard of Practice  • Investment gains and losses can be smoothed over a period not exceeding 15 years  • Subject to a corridor of no more than 120% nor less than 80% of market value	This is based only on the assets within the CalPERS trust fund. If additional assets of the plan exist outside of the CalPERS trust fund, then the actuary must devise a method of dividing the liabilities between those to be covered by the CalPERS trust and those covered by the outside assets and apply the asset smoothing method required to the CalPERS assets. The actuary will report to CalPERS only the liabilities of the plan to be covered by the CalPERS trust assets.

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Amortization Period	Determined by the plan actuary but not outside of the requirements of GASB 43 and 45.  The amortization of the unfunded	
	liability/surplus shall not assume payroll increases greater than 3.25% per annum.	
Demographic Assumptions	If the members are covered by a defined benefit pension plan, then the actuary must use the same pre-retirement decrements, salary growth (due to Seniority, Merit and Promotion) if OPEB benefits are based upon salary, percent married, etc. and post-retirement mortality as the assumptions used for the pension plan valuation.  If the members are not covered by a defined benefit pension plan, the plan actuary should, in consultation with the employer sponsor of the OPEB plan chose assumptions that are reasonable and appropriate.	For OPEB plans whose members are also members of CalPERS' or other multiple employer defined benefit pension plans, the actuary should use the same pre-retirement decrements and post-retirement mortality as is used for CalPERS or other multiple employer pension valuations, or certify that adjustments to these assumption, or to other demographic assumptions, are warranted for the specific OPEB valuation. Such adjustments may result from the agency's materially different experience known to the actuary, or from the actuary using simplified assumptions that will not materially change the valuation results.
Economic Assumptions	General Inflation: 3.0% compounded annually Discount Rate: If the employer's funding policy is to contribute consistently an amount at least equal to the ARC, the discount rate should be no higher than the CalPERS' approved discount rate for the asset allocation strategy selected by the employer. The discount rates adopted by the CalPERS Board are as follows:	The expected investment return assumption was developed using a building block approach based on the each of the three asset allocation strategies as well as taking into account both short and long term return expectations, and the expected cash flows of the CERBT of the portfolio and the expected real return for each asset class.
	<ul> <li>Strategy 1: 7.61%</li> <li>Strategy 2: 7.06%</li> <li>Strategy 3: 6.39%</li> </ul>	Information on the asset allocation of the CERBT can be found on the CalPERS website.  Long term assumptions about each asset class (expected real return, standard deviation, and correlation coefficient) were developed through a

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	assumed return on the OPEB Trust, currently 7.75% per annum.  For employers whose contribution policy is to contribute less than the ARC, but more than pay as you go, the discount rate should be a blended rate that interpolates as prescribed by GASB Statements 43 and 45. For this purpose the discount rate at the ARC end point should be one of the rate associated with the chosen strategy shown above 7.75% and the discount rate for the pay as you go end point should be between 4% and 5%.	joint effort of the senior CalPERS investment and actuarial staff and outside consultants as part of the CalPERS Board Asset Liability workshop.  Note that the discount rate approved by the CalPERS Board reflects the median expected return for each asset allocation strategy and does not contain any margin for adverse deviation. It is acceptable for actuaries and employer to use a lower discount rate than the ones listed in this model to account for a margin for adverse deviation.
Health Assumptions	For vision, dental, etc., other than medical benefits the actuary is to use a flat trend rate between 2% and 5%.  For medical benefits there will be the need for six tables of medical cost trend rates as follows:  Pre-Medicare Eligible Post-Medicare Eligible HMO HMO PPO PPO Indemnity Plan Indemnity Plan Indemnity Plan Each table shall be a select and ultimate table, with the select period of no more than 10 years and the ultimate trend rate must be between 4% and 6%.  If there is the need for a separate pharmacy trend rate, it is to be the same as the medical trend rate tables or no more than .5% higher.	For PEMHCA plans, CalPERS will conduct an annual survey early in the valuation year and announce the average trend rates of that survey. Actuaries across California should strive to achieve uniform trend rates assumptions for all PEMHCA employers.
Implicit Rate Subsidy	No methods or assumptions are currently	Actuaries will determine whether or not the plans

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	stipulated.	are community rated based on actuarial standards of practice.
		Note that in the opinion of CalPERS actuarial staff, PEMHCA plans are community rated (except for the State of California) and no age related costs need to be computed.
Other Assumptions	Generally left to the individual actuary who must certify that the methods and assumptions are reasonable and appropriate. Examples of these assumptions are:	
	Proportion of members that waive coverage at retirement	
	Proportion of members that chose a particular plan at retirement	
	% of future retirees with dependents, and type of coverage (single, couple or family) at and after retirement	